FAQs on WNV in Horses

O. What is the current status of West Nile virus in the United States?

The 2012 West Nile virus outbreak is the largest ever seen in the United States, according to the latest analysis from the Centers for Disease Control and Prevention (CDC). The number of human cases so far this year is the highest ever recorded since the disease was first reported in 1999.

Q. Why are there so many cases of West Nile virus this year?

The increase in West Nile cases is predominantly due to a mild winter followed by scorching summer temperatures which provided ideal conditions for mosquitoes to breed and thrive.

Q. Why should I worry about West Nile virus?

A. West Nile virus (WNV), which is carried by mosquitoes, is a serious threat to horses. In 2003, there were 5,181 lab-confirmed cases in equids nationally and over 15,000 cases in 2002. In 2002, the virus had moved into the mid-west states, and Fort Dodge had just received conditional approval for their new WNV vaccine. Cases of WNV in equids have declined substantially after introduction of Fort Dodge's vaccine. In 2006, 1086 horses in the USA and Puerto Rico were confirmed through laboratory testing to be infected with West Nile Virus. 2005 showed similar numbers (1,088), as did 2004 (1,406). The national **mortality rate** (the number of horses that die out of the number of horses that are sick) has been running around 36%. In Idaho equine cases, mortality approached 40%. Approximately 340 **Idaho** horses were diagnosed (lab-confirmed) with WNV in 2006. Many more suspected of being affected with WNV were reported by veterinarians across southern Idaho. Of the lab-confirmed cases, information collected from the veterinarian showed that 86% of these sick horses had never received a vaccination for WNV. The percentage rises to 99% if we add the number of horses that were incompletely vaccinated. All Idaho horses that died had never received any vaccinations for WNV. Please vaccinate your horses!

Q. Is there a vaccine for West Nile virus?

A. Yes, currently there are three vaccines available for horses. Pfizer manufactures the Innovator® vaccine, Merial manufactures the Recombitek® vaccine and Intervet/Merck manufactures the EquiNile® vaccine. All three vaccines have been licensed by USDA, Center for Veterinary Biologics, which means they have proven that they are effective in preventing WNV in the majority of horses when vaccinated according the label. Ideally, horses that have not received the vaccine before should be vaccinated with 2 doses followed by, at minimum, an annual booster. The WNV vaccine should be administered at least three weeks prior to mosquito exposure to allow the horse's immune system adequate time to respond to the vaccine. If you have additional questions about the vaccine and its use, please contact your veterinarian or go to the vaccine company website.

Q. How might my horse get West Nile virus?

A. WNV is transmitted only when an infected mosquito bites a horse. Horses <u>cannot</u> acquire the virus from another infected horse or from other infected animals. Mosquitoes also <u>cannot</u> acquire the virus from an infected horse or human to then transmit to another animal or human. Mosquitoes only acquire the virus from biting an infected bird.

Q. How can I tell if my horse is at risk for contracting West Nile virus?

A. Now that WNV has reached the western coast of the United States, any horse that comes in contact with mosquitoes is at risk.

Q. How would I be able to tell if my horse was infected?

A. Infected horses may display one or more of the following symptoms:

- Lack of coordination and stumbling (most commonly described symptom)
- Depression or apprehension
- Weakness of the hind limbs
- Falling down, inability to rise
- Muscle twitching
- Grinding teeth
- Colicky appearance
- Hypersensitivity
- Excessive sweating
- Disorientation
- Convulsions
- Paralysis

Q. What should I do if I see any of these signs?

A. Call your veterinarian immediately. Prompt treatment may be life-saving!

Q. How can I protect my horse from West Nile virus?

- A. You can take important actions such as:
 - 1. VACCINATE for WEST NILE VIRUS. Several vaccines are available. Please contact your veterinarian.
 - **2. REDUCE STANDING WATER**. Mosquitoes require standing water to reproduce. By eliminating, reducing or treating standing water on your property, you will help prevent the mosquito population from growing. Sources of standing water and ways to treat or eliminate them include:

Water troughs and buckets -- Scrub troughs to remove algae and replace water at

least every three days.

<u>Clogged gutters and drains</u> -- Keep gutters and drains clean; use Mosquito Dunks®** or equivalent product if standing water cannot be eliminated.

<u>Old tires</u> -- Remove, cut, or treat all old tires on your property - including tire jumps and those used to hold down tarps. (Your county mosquito agency can assist you with proper tire management.)

Wash stalls and collection drains under wash stalls -- Use Mosquito Dunks® or equivalent product in collection drains if water collects and stands for more than three days.

Any natural water including ponds, brooks and streams -- Call your county mosquito agency for an assessment. (This service is provided at no charge to county residents.)

<u>Drainage ditches on the farm or storm drains surrounding the farm</u> -- Use Mosquito Dunks® or equivalent product in ditches on the farm and call your county mosquito agency regarding storm drains surrounding the property.

<u>Bird baths</u> -- Empty, clean, and replace water at least every three days.

<u>Wading pools and plastic swimming pools</u> -- Chlorinate pools, or clean and replace water at least every three days.

<u>Standing puddles on ground or in tarps</u> -- Try to prevent water from accumulating in puddles. If this is not possible, eliminate the water by sweeping it out or otherwise removing it if it stands for longer than three days. If you cannot eliminate the water, contact your county mosquito agency for recommendations.

- **3. MANAGE TURN-OUT.** Mosquitoes feed at dawn and dusk, so turn-out should be arranged to have horses inside at these times, if possible. This scheduling is especially critical from mid-August until the first killing frost (in 2001 this was late November), the period when horses are most likely to be infected.
- **4. MAINTAIN IMMUNE SYSTEM.** Keep your horse's health maintained as recommended by your veterinarian (including vaccines, parasite control and nutrition) to optimize immune function. A weakened immune system may leave your horse more susceptible to infection from the West Nile virus.

For more information on WNV and links to Center for Disease Control website, visit the Idaho Health and Welfare website at www.healthandwelfare.idaho.gov

^{**} Mosquito Dunks® are small pellets containing Bacillus thuringiensis israelensis (BTI), which are designed to be placed in water. They kill mosquito larvae for about 30 days and may be purchased in feed and seed or home improvement stores. Be sure to follow directions on the label.